



Docket No.: 069804-0159

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Customer Number: 53080
Nigel J. TOLSON : Confirmation Number: 9807
Application No.: 10/040,535 : Group Art Unit: 2618
Patent No. 7,127,226 B2 :
Filed: December 28, 2001 : Examiner: Charles C. Chow
Issued: October 24, 2006 :
For: TWIN-T DUAL NOTCH FILTER

REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 CFR 1.322

Mail Stop CERTIFICATE OF CORRECTION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Certificate
MAY 18 2007
of Correction

In reviewing the above-identified patent, a printing error was discovered therein requiring correction in order to conform the Official Record in the application.

The error noted is set forth on the attached copy of form PTO-1050 Rev. 2-93 in the manner required by the Commissioner's Notice.

Specifically, claim 3, Column 4, the paragraph beginning at line 16 and ending at line 22 should be replaced by the following two paragraphs:

- - a fourth analog active twin-T filter in a fourth signal path defining said first sharp notch at the center the second adjacent channel, said fourth signal path comprising a differential of said quadrature-phase signal path; and

a fourth analog passive twin-T filter section coupled to receive output of the fourth analog active twin-T filter, defining said second sharp notch at the center of a next adjacent channel, to suppress

MAY 18 2007

spurious signals at frequencies of modulation product, said fourth analog passive twin-T section being cross coupled with said second analog passive twin-T section. - -

A copy of the relevant pages of Applicant's amendment filed July 8, 2004 showing the correct version of the text is attached for your information and convenience.

The change requested herein occurred as a result of printing the Letters Patent and the Certificate should be issued without expense under Rule 322 of the Rules of Practice. Accordingly, Applicants request issuance of the Certificate of Correction.

Please charge any shortage in fees due in connection with the filing of this paper to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Michael E. Fogarty
Registration No. 36,139

**Please recognize our Customer No. 53080
as our correspondence address.**

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 MEF:bd
Facsimile: 202.756.8087
Date: May 16, 2007

WDC99 1394101-1.069804.0159

MAY 18 2007

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

APPLICATION NO.: 10/040,535

PATENT NO. : 7,127,226 B2

DATED : October 24, 2006

INVENTOR(S): Nigel J. TOLSON

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS:

Claim 3, Column 4, replace the paragraph beginning at line 16 and ending with line 22 with the following two paragraphs:

- - a fourth analog active twin-T filter in a fourth signal path defining said first sharp notch at the center the second adjacent channel, said fourth signal path comprising a differential of said quadrature-phase signal path; and

a fourth analog passive twin-T filter section coupled to receive output of the fourth analog active twin-T filter, defining said second sharp notch at the center of a next adjacent channel, to suppress spurious signals at frequencies of modulation product, said fourth analog passive twin-T section being cross coupled with said second analog passive twin-T section. - -



Serial/Patent No.: 10/040,535

Filing/Issue Date: 12/28/01

Applicant: Nigel J. Tolson

Title: Twin-T Dual Notch Filter

TRP Docket No.: 034942-268

Atty/Secty Initials: REK/dm

Date Mailed: 7-8-04

Docket Due Date: 7/8/04

The following has been received in the U.S. Patent & Trademark Office on the date stamped hereon:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Amendment/Response (13 pgs.) | <input type="checkbox"/> Drawings: _____ # of sheets includes _____ figures |
| <input type="checkbox"/> Appeal Brief (_____ pgs.) (in triplicate) | <input type="checkbox"/> IDS & PTO 1449 (_____ pgs.) |
| <input type="checkbox"/> Application - Utility (_____ pgs. with cover & abstract) | <input type="checkbox"/> _____ Pieces of Prior Art Enclosed |
| <input type="checkbox"/> Application - Rule 1.53(b) Continuation (_____ pgs.) | <input type="checkbox"/> Issue Fee Transmittal |
| <input type="checkbox"/> Application - Rule 1.53(b) Division (_____ pgs.) | <input type="checkbox"/> Submission of Formal Drawings: _____ # of sheets includes _____ figures |
| <input type="checkbox"/> Application - Rule 1.53(b) CIP (_____ pgs.) | <input type="checkbox"/> Notice of Appeal |
| <input type="checkbox"/> Application - Rule 1.53(d) CPA (_____ pgs.) | <input checked="" type="checkbox"/> Postcard |
| <input type="checkbox"/> Application - PCT (_____ pgs.) | <input type="checkbox"/> Preliminary Amendment (_____ pgs.) |
| <input type="checkbox"/> Application - Provisional (_____ pgs.) | <input type="checkbox"/> Reply Brief (_____ pgs.) |
| <input type="checkbox"/> Assignment and Cover Sheet | <input type="checkbox"/> Req and Cert. Not to Publish - Rule 1.213 |
| <input type="checkbox"/> Certificate of Correction | <input type="checkbox"/> Request for Extension of Time _____ Month(s) |
| <input checked="" type="checkbox"/> Certificate of Mailing | <input type="checkbox"/> Response to Notice to File Missing Parts |
| <input type="checkbox"/> Declaration & POA (_____ pgs.) | <input type="checkbox"/> Copy of PTO Notice to File Missing Parts |
| <input type="checkbox"/> Fee Transmittal | <input checked="" type="checkbox"/> Transmittal Letter (original & copy) |
| <input type="checkbox"/> Request for Continued Examination (RCE) (_____ pgs.) | <input type="checkbox"/> Express Mail No.: _____ |
| <input checked="" type="checkbox"/> Other: | <input type="checkbox"/> Check(s) \$ _____ |
| copy of Decision dated 12/11/02 | <input checked="" type="checkbox"/> Deposit Acct. No. 50-1698 \$\$43.00 |

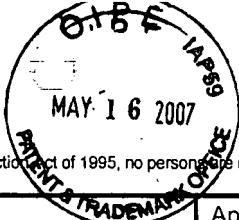
Patent Code: 2201

Client/Matter # 34942 - 268

DOCKETED

JUL - 9 2004

MAY 16 2007



PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/040,535
	Filing Date	12/28/01
	First Named Inventor	Nigel J. Tolson
	Art Unit	2685
	Examiner Name	Charles Chiang Chow
Total Number of Pages in This Submission	Attorney Docket Number	034942-268

ENCLOSURES (check all that apply)☒ Fee Transmittal Form☐ Fee Attached☒ Amendment / Reply☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Response to Missing Parts/
Incomplete Application☐ Response to Missing
Parts under 37 CFR
1.52 or 1.53☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a
Provisional Application☐ Power of Attorney, Revocation
Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s) _____☐ After Allowance Communication to
Group☐ Appeal Communication to Board of
Appeals and Interferences☐ Appeal Communication to Group
(Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s)
(please identify below):return postcard; copy of
Decision dated 12/11/02

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	William E. Winters, Reg. No. 42,232 - Thelen Reid & Priest LLP
Signature	
Date	JULY 8, 2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Diane Morse		
Signature		Date	7-8-04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

MAY 18 2007

FEE TRANSMITTAL
for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.101.**TOTAL AMOUNT OF PAYMENT** (\$) 43**Complete If Known**

Application Number 10/040,535
 Filing Date 12/28/01
 First Named Inventor Nigel J. Tolson
 Examiner Name Charles Chiang Chow
 Art Unit 2685
 Attorney Docket No. 034942-268

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None
 Order

☒ Deposit Account:Deposit
Account
Number

50-1698

Deposit
Account
Name

Thelen Reid & Priest LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee
 to the above-identified deposit account.

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims		Fee from below		Fee Paid
Total Claims	12	-20 **	=	0	X		= 0
Independent Claims	4	-3 **	=	1	X	43	= 43
Multiple Dependent					X		= 0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$) 43

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$) 0

SUBMITTED BY**Complete (if applicable)**

Name (Print/Type)

William E. Winters

Registration No.
(Attorney/Agent)

42,232

Telephone

408-292-5800

Signature

Date

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

MAY 18 2007



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Nigel J. Tolson
APPLICATION NO.: 10/040,535
FILING DATE: December 28, 2001
TITLE: TWIN-T DUAL NOTCH FILTER
EXAMINER: Charles Chiang Chow
ART UNIT: 2685

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date printed below:

Date: 7-8-04

Name: *Diane Morse*
Diane Morse

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22-313-1450

AMENDMENT

In response to the Office Action dated April 8, 2004, please amend the above-identified application as follows.

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

MAY 18 2007

Amendments to the Claims:

The listing of claims below will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A filter circuit apparatus for suppression of spurious signals in a superheterodyne circuit for receiving communication in channels comprising:

a first analog active twin-T filter in a first signal path defining a first sharp notch at the center a second adjacent channel; and

a first analog passive twin-T filter section coupled to receive output of the first analog active twin-T filter, defining a second sharp notch at the center of a next adjacent channel, to suppress spurious signals at frequencies of modulation product.

2. (Currently Amended) The apparatus of claim 1 wherein said superheterodyne circuit employs an in-phase and a quadrature phase signal path, said first signal path corresponding to said ~~first~~in-phase signal path, the apparatus further including:

a second analog active twin-T filter in a second signal path defining said first sharp notch at the center the second adjacent channel, said second signal path corresponding to a quadrature phase signal path; and

a second analog passive twin-T filter section coupled to receive output of the second analog active twin-T filter, defining said second sharp notch at the center of a next adjacent channel, to suppress spurious signals at frequencies of modulation product.

3. (Currently Amended) The circuit according to claim 2 wherein said superheterodyne circuit employs differentials feed in each one of said first signal path and said second signal path, the apparatus further including:

a third analog active twin-T filter in a third signal path defining said first sharp notch at the center of the second adjacent channel, said third signal path comprising a differential of said in-phase signal path;

a third analog passive twin-T filter section coupled to receive output of the third analog active twin-T filter, defining said second sharp notch at the center of a next adjacent channel, to suppress spurious signals at frequencies of modulation product, said third analog passive twin-T section being cross coupled with said first analog passive twin-T section;

a fourth analog active twin-T filter in a fourth signal path defining said first sharp notch at the center the second adjacent channel, said fourth signal path comprising a differential of said quadrature-phase signal path; and

a fourth analog passive twin-T filter section coupled to receive output of the fourth analog active twin-T filter, defining said second sharp notch at the center of a next adjacent channel, to suppress spurious signals at frequencies of modulation product, said fourth analog passive twin-T section being cross coupled with said second analog passive twin-T section.

4. (Currently Amended) The apparatus according to claim 3 wherein each active twin-T section is in active bootstrap configuration.

5. (Currently Amended) The apparatus according to claim 1 wherein the active twin-T section is in active bootstrap configuration.

6. (Original) A method for processing multiple signal modes according to different radio standards of a received RF signal, comprising:

performing downconversion of the received RF signal to produce analog I and Q signals; and for each of the analog I signal and the analog Q signal, filtering out unwanted signals by:

for a first standard, processing the analog signal using a first passive notch filter to produce a first filtered signal; and

for a second standard, processing the analog signal using an active notch filter to produce a second filtered signal;

wherein the active notch filter exhibits smaller group delay than the passive notch filter.

7. (Original) The method according to claim 6 further includes, for the second standard, processing the second filtered signal using a second passive notch filter to produce a third filtered signal.

8. (New) A dual-mode communications receiver, comprising:
a demodulator operable to provide in-phase and quadrature-phase baseband signals;
a first active twin-T filter having an input coupled to an in-phase output of said demodulator;

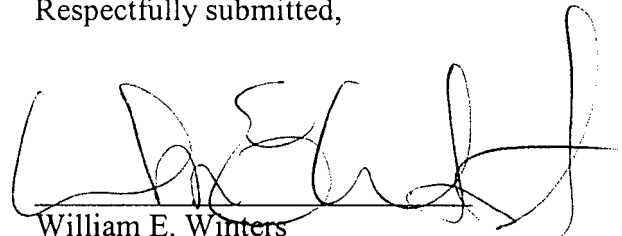
CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 408-282-1857.

Respectfully submitted,

Dated: JULY 8, 2004


William E. Winters
Reg. No. 42,232

THELEN REID & PRIEST LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 282-1857 Telephone
(408) 287-8040 Facsimile

Attachment